alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein multiple deposits are made using multiple deposition regions supplied from a single aerosol source by multiplexing the application of the alternating deposition field between the deposition regions.

REMARKS

In response to the Examiner's objections to the Figures, corrected formal drawings will be filed upon allowance of the Application.

Claims 1 and 48 have been amended to clarify the invention, to better define the invention over the prior art and to employ more idiomatic English. More particularly, claims 1 and 48 have been amended to clarify that the aerosol particles in the second region have essentially zero velocity. Claims 32-34, 48, 52-57, 60, 63, 64, 66, 67 and 69-71 have been amended in an earnest effort to address the § 112 rejections raised by the Examiner. Claim 34 has also been rewritten in independent form, and claims 32 and 33 amended to depend thereon. No new matter has been entered by any of the previously stated amendments.

Turning to the rejection of the claims as anticipated or obvious from the art, independent claims 1 and 48, as amended, require that the charged particles in the second region have essentially zero velocity. WO 98/42446 does not teach or suggest this.

Moreover, WO '446 moves charged particles toward the target substrate by the mechanical force of the spray nozzle, as opposed to Applicants' claims which require the use of an alternating electrical field. These are two completely separate and distinct models of locomotion. Likewise, it is not obvious from WO '446 that introducing another electrical force

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will not upset the balance of the system. Therefore, it is not obvious to apply the teaching of the prior art to create the present claimed invention.

Quite apart from the foregoing, while Applicants welcome a rigorous examination, Applicants object to the apparent inconsistencies in the examination of this Application by different Examiners. In the Action mailed November 15, 2001, the previous Examiner indicated that claims 3-9, 14-30, 32-37, 49-65 and 69-71 “. . . would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.” The claims were so rewritten in independent form in Amendment D. This was done in good faith at a cost of nearly \$2,000.00 in Patent Office fees alone! No other changes were made to these claims in that Amendment. There were no clear errors in the previous Action mailed November 15, 2001. (A few very minor antecedent and omission errors noted by this Examiner have been corrected in this Amendment, but the substance of the claims has not changed.) Now, claims 3-9, 14-30, 32-37, 49-67 and 69-71 have been rejected based on a reference that a previous Examination held did not anticipate or render obvious these claims.

MPEP § 706.04 provides:

[f]ull faith and credit should be given to the search and action of a previous examiner unless there is a clear error in the previous action or knowledge of other prior art. In general, an examiner should not take an entirely new approach or attempt to reorient the point of view of a previous examiner or make a new search in hope of finding something.

It is submitted, absent clear error on the part of the earlier Examiner, the current Examiner should withdraw the art rejections, and allow the Application.

Having dealt with the objections raised by the Examiner, the Application is believed to be in order for allowance. Early and favorable action is respectfully requested.

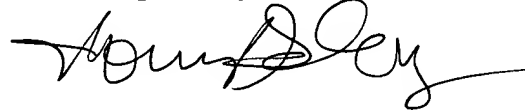
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A credit card payment Form PTO 2038 authorizing payment of \$84.00 in payment of the added independent claim accompanies this Amendment. In the event there are any fee deficiencies or additional fees are payable, please charge them (or credit any overpayment) to our Deposit Account No. 08-1391.

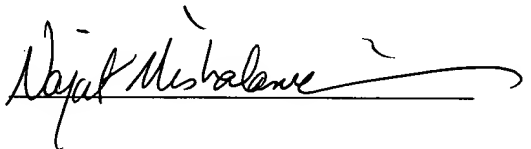
Respectfully submitted,



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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Assistant Commissioner of Patents, Washington, D.C. 20231 on September 10, 2002, at Tucson, Arizona.

By 

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MARKED COPY OF AMENDED CLAIMS

SERIAL NO. 09/299,388

DOCKET: MICRODOSE 99.01

MARKED CLAIMS SHOWING CHANGES MADE:

1. (Thrice Amended) A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles with essentially a zero velocity in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby to drive said charged particles from the aerosol and deposit said charged particles as oppositely charged layers on said dielectric substrate thus forming a built-up deposit.

32. (Amended) The method according to claim [3] 34, wherein said ion emitter comprises a silent electric discharge device.

33. (Amended) The method according to claim [3] 34, wherein said ion emitter comprises an ion radiation source.

34. (Amended) [The method according to claim 12] A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said

dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said dielectric substrate thus forming a built-up deposit, wherein said aerosol particles are charged by an ion emitter.

48. (Twice Amended) A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, with said aerosol essentially stationary in said second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby to drive said particles from the aerosol and deposit said charged particles as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode.

52. (Twice Amended) A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein said particles comprise a pharmaceutical.

53. (Twice Amended) A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said

aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein said aerosol carrier is nitrogen gas.

54. (Twice Amended) A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said substrate opposite said underlying electrode, wherein said dielectric substrate comprises a blister pack.[.]

55. (Thrice Amended) A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein said substrate comprises an electrically insulating material.

56. (Twice Amended) A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit

of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein said substrate is comprised of an electrically conducting material.

57. (Twice Amended) A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate [sand] and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein said electrically charging means employs a corona wire or corona emitting points.

60. (Twice Amended) A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein said electrically charging means includes triboelectric charging of said aerosol particles or induction charging of said aerosol particles.

63. (Twice Amended) A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said

aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein said aerosol particles are charged within said deposition region.

64. (Twice Amended) A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein said electrically alternating field has a magnitude between about 1 kV/cm and about 30 kV/cm.

67. (Twice Amended) The method according to claim 64, wherein said electrically alternating field is formed between a first electrode positioned at one side of said deposition region opposite and facing said dielectric substrate and a second electrode contiguous to said dielectric substrate.

69. (Twice Amended) A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying

electrode, wherein the pattern of deposited material is defined by an electrically conducting mask disposed adjacent said charging means.

70. (Twice Amended) A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein the aerosol particle mass flow is monitored whereby the mass of deposited particles is controlled.

71. (Thrice Amended) A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein multiple deposits are made using multiple deposition regions supplied from a single aerosol source by multiplexing the application of the alternating deposition field between the deposition regions.